

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-99. **(Cancelled)**

100. **(Currently amended)** A nucleic acid encoding a chimeric transcriptional regulatory protein that comprises:

at least two heterologous nucleic acid binding domains, at least one of which is a zinc finger, wherein each nucleic acid binding domain binds a portion of a composite nucleotide sequence; and

a transcriptional regulatory domain, wherein the chimeric transcriptional regulatory protein (a) binds ~~preferentially~~ to the composite nucleotide sequence ~~over any of said portions thereof~~, and (b) when bound to the composite nucleotide sequence, regulates transcription thereof from an operatively linked promoter.

101. **(Currently amended)** The nucleic acid of claim 100, wherein the at least two heterologous nucleic acid binding domains include at least two zinc fingers.

102. **(Currently amended)** The nucleic acid of claim 100, wherein the chimeric transcriptional regulatory protein comprises a third ~~nucleic acid binding domains include at least a second~~ nucleic acid binding domain selected from the group consisting of helix-loop-helix domains, helix-turn-helix domains, basic domains, zinc fingers, and combinations thereof.

103. **(Previously presented)** The nucleic acid of claim 100, wherein the transcriptional regulatory domain activates transcription.

104. **(Previously presented)** The nucleic acid of claim 100, wherein the transcriptional regulatory domain represses transcription.

105. **(Previously presented)** The nucleic acid of claim 100, wherein at least one nucleic acid binding domain is selected from the group consisting of helix-loop-helix domains, helix-turn-

helix domains, basic domains, and combinations thereof.

106. **(Previously presented)** The nucleic acid of claim 100, wherein the zinc finger is from a protein selected from the group consisting of transcription factor IIIA, SW15, Krüppel, Hunchback, and a steroid receptor.

107. **(Previously presented)** The nucleic acid of claim 100, wherein the zinc finger is from Zif268.

108. **(Previously presented)** The nucleic acid of claim 100, wherein the at least two nucleic acid binding domains are separated by at least one amino acid.

109-114. **(Cancelled)**

115. **(Currently amended)** A vector comprising a nucleic acid of ~~claim 100~~ any one of claims 100-108 and 120-124.

116. **(Previously presented)** The vector of claim 115, further comprising expression control sequences permitting gene expression in eukaryotic cells.

117. **(Currently amended)** A kit comprising a vector of claim 115 and a gene operably linked to a composite ~~binding site~~ nucleotide sequence to which the chimeric transcriptional regulatory protein encoded by the nucleic acid binds.

118. **(Cancelled)**

119. **(Currently amended)** A method for modulating expression of a gene in a cell, comprising:

providing a cell containing a ~~chimeric DNA binding element~~ composite nucleotide sequence operatively linked to a promoter which is operatively linked to the gene; and
expressing the nucleic acid of ~~claim 100~~ any one of claims 100-108 and 120-124 in the

cell, such that the chimeric transcriptional regulatory protein is produced, binds to the ~~chimeric DNA-binding element~~ composite nucleotide sequence, and regulates transcription of the gene from the promoter.

120. **(New)** The nucleic acid of claim 100, wherein the chimeric transcriptional regulatory protein displays a binding specificity that is distinct from the binding specificity of the individual nucleic acid binding domains.

121. **(New)** The nucleic acid of claim 100, wherein the chimeric transcriptional regulatory protein binds preferentially to the composite nucleotide sequence over any of said portions thereof.

122. **(New)** The nucleic acid of claim 100, wherein the at least two nucleic acid binding domains are separated by 1, 2 or 4 amino acids.

123. **(New)** The nucleic acid of claim 100, wherein the at least two nucleic acid binding domains are separated by a distance of less than about 50 Å.

124. **(New)** The nucleic acid of claim 100, wherein the at least two nucleic acid binding domains are separated by a distance of less than about 10 Å.